



CEN/TC 312/WG1

- CE Mark

- Energylabelling

22./23.10.2019

Solar Keymark Network Meeting

Dr. A. Bohren, SPF Testing



HSR

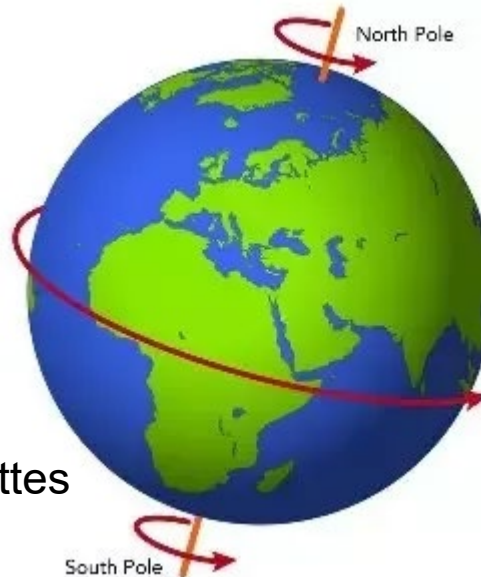
HOCHSCHULE FÜR TECHNIK
RAPPERSWIL

FHO Fachhochschule Ostschweiz



INSTITUT FÜR
SOLARTECHNIK

- The draft was prepared with the vision of having a harmonised standard under the European construction product regulation CPR.
- Draft includes also specific Z-Annexes for CPR, ErP and Energy Labelling.
- Standard should also serve as basis for Solar Keymark and other certification schemes.
- New version is overdue.
The current EN 12975-1 version is still referencing to EN 12975-2:2006
- Draft accepted in enquiry phase by the national committees
- But....



■ The Problem: The Construction Product Regulation



EN 12975 The Problem: The Construction Product Regulation

- Very strict rules apply for standards under CPR
Scope must be approved by the commission.
- The general procedure:
 - Mandate from the commission to elaborate a standard under CPR.
 - CEN "answer to the mandate"
 - Commission approves/accepts answer
 - Standard can be elaborated **but** can include only essential properties named in the answer to the mandate, even if they have nothing to do with CPR.
 - Normal enquiry as usual. Commenting / voting by the national StandOrgs.
 - HaS Assessment by a consultant appointed by CEN (Ernst & Young) **x**
 - Approval by the commission (or not)
 - Acceptance by all member states
 - Publication in OJE
 - Harmonized
(once harmonized: product standard must be used to get CE mark)

EN 12975 The Problem: The Construction Product Regulation

- Scope was changed
- What we need for Solar Keymark and for ErP and Energy Labelling is going beyond the basic requirements of CPR.
 - Examples:
 - We included the possibility to declare noise.
 - Wrong: This is not in the answer to the mandate.
 - We ask for installer manual.
 - Wrong: This was not in the answer to the mandate
 - We included all the calculations for Energylabelling
 - Wrong: This was not in the answer to the mandate
 - etc. etc.
- Better:
 - Think in advance about everything that is important.
 - Include in the answer to the mandate.
 - Once approved it is mandatory to include it and to provide a DoP

■ Walk further on the same path:

- Revise the answer to the mandate. We have to be sure about what must be included in this mandate. Once approved by the commission – there is no way back.
- Commission is in overload as many other products have the same problem. It is not possible to give a time estimate – even about when to receive a reply on an answer to the mandate.
- Work on the current draft and try to improve such that it has a chance to be accepted.
- Time: Years
- Ressources / Experts ?

■ We will be handcuffed by the commission: All major changes will require a revised/amended answer to the mandate.

■ "Forget" about CPR

- Situation of today. If there is no harmonized standard, there is no obligation to put the CE mark on the product. (today)
- If a CE mark is needed: Go to a notified ETAG body and get the CE mark for your product. Situation today. Once there is a harmonized standard this is not possible anymore.
- Remove all that has to do with CPR from our draft, submit as normal standard (voluntary as today)
- Timing is under our control.
All delays were for the main reason to be in line with the CPR.
New basis for Keymark
ErP content can be included +/- as we like it.

■ Voices from other CPR-TCs: "Try not to be a construction product". The disaster is rather big. A lot of complaints about the situation.

■ Hope: Maybe they have to change the rules again.

EN 12975 – How to continue

- **Split in 2 standards: A specific "CPR-standard" and a "normal standard"**
 - Scope something like: "Solar collectors for construction purposes"
 - Go the hard way and make a reduced standard only to satisfy the very basics of CPR. Not usable for SKN and ErP etc.
 - All the rest is in a second standard as today.
 - Nonsense but obviously a path that is taken into consideration by other TCs

- **Remove all CPR and publish asap.**
Then consider a new revision under CPR again (in 1-3 years).

- The "good" news.

It is now known who is the HaS Consultant.

Under some condition we can ask questions and get answers.

Webmeeting took place last week.

EN 12975 Energy Labelling

- **The package label is a complete flop.**
Does not work, is not used, is not understood, too complicated.
- **Problems with EN 12976 (ISO 9459-5). (SOLICS)**
- **Problems with the transitional methods (SOLCAL 2013 and 2017)**
- **No real solutions available for solar thermal systems in Energylabelling.**
EN12977 is not a simple path
- **Energylabel does not have to be very "physically correct"**
Much more important:
It must indicate clear limits for market surveillance.

Example: Annex VIII of REGULATION (EU) No 811/2013

Verification procedure for market surveillance purposes

2. The model shall be considered to comply with the applicable requirements if:
 - (a) for heaters, packages of space heater, temperature control and solar device, and packages of combination heater, temperature control and solar device, the seasonal space heating energy efficiency η_s is not more than 8 % lower than the declared value at the rated heat output of the unit;
 - (b) for combination heaters and packages of combination heater, temperature control and solar device, the water heating energy efficiency η_{wh} is not more than 8 % lower than the declared value at the rated heat output of the unit;
 - (c) for heaters, the sound power level L_{WA} is not more than 2 dB higher than the declared value of the unit;
 - (d) for temperature controls, the class of the temperature control complies with the declared class of the unit;
 - (e) for solar devices, the collector efficiency η_{col} is not more than 5 % lower than the declared value of the unit;
 - (f) for solar devices, the standing loss S of the solar hot water storage tank is not more than 5 % higher than the declared value of the unit; and
 - (g) for solar devices, the auxiliary electricity consumption Q_{aux} is not more than 5 % higher than the declared value of the unit.
3. If the result referred to in point 2 is not achieved, the Member State authorities shall randomly select three additional units of the same model for testing and provide the information on the test results to the authorities of the other Member States and to the Commission within one month of testing.

EN 12975 Energy Labelling

- **Revision of Lot1 and Lot2 are ongoing.**
Preparatory studies
www.ecoboiler-review.eu/documents.htm for the space/combination heater
www.ecohotwater-review.eu/documents.htm for the water heater
- **Project ECOTEST:**
Reproducibility and uncertainty of tests (method / laboratories)
Not only solar but all other Lot1/2 appliances
Report not yet published
- **Main result from solar side:**
 - **No problem with collectors**
 - **Several problems with systems (EN 12976 / ISO 9459-5 / EN12977)**
SOLICS / SOLCAL2013 / SOLCAL2017 / SOLTHERM inconsistent results
 - **Different standards in different TCs for storages with different results.**
Standing losses volume

EN 12975 Energy Labelling

- **Commission need simplified methods.**
Solar thermal needs simplified methods
- **Solar is not using energy, hence $\eta \rightarrow \infty$**
(Energy use of Pumps and controllers will be set to 0)
Energy use of *solar* is what is used by the nonsolar backup device.
- **Method must be very simple (e.g. lookup table)**
- **Market surveillance must be possible**
- **Proposals on the table and discussed in ESTIF/SHE**
Use collector rating only: Basis is Gross thermal yield - "Scenocalc"
No EN12976/12977 system rating anymore

EN 12975 – How to continue

- **Remove all CPR and publish EN12975 asap.**
 - **Solid basis for Solar Keymark**
 - **Include Gross Thermal Yield for Energy labelling**
 - **In line with 9806**

Then consider CPR again (in 1-3 years).

The CEN/TC 312 Initiative for Hybrid Standards

■ CEN/TC 312 (solar) has taken the initiative (September 2019):

A letter from CEN/TC 312 was sent to:

CEN/TC48, CEN/TC57, CEN/TC62, CEN/TC89, CEN/TC109,
CEN/TC110, CEN/TC113, CEN/TC130, CEN/TC131, CEN/TC156,
CEN/TC163, CEN/TC164, CEN/TC171, CEN/TC180, CEN/TC197
CEN/TC208, CEN/TC228, CEN/TC247, CEN/TC282, CEN/TC284,
CEN/TC295, CEN/TC299, CEN/TC319, CEN/TC335, CEN/TC343,
CEN/TC350, CEN/TC371, CEN/TC402, CEN/TC442

EHI, ECOS, Heat pumps association, EUBIA, EPIA, Installers Association,
Geothermal association, Euro Gas Association, European Drinking water
association, Bioenergy Europe Association.

■ Question:

Are you interested in the umbrella project "**Standards for Hybrid Systems**"

■ Workshop is scheduled : 13. February 2020 (preliminary!)